DOCUMENT RESUME

ED 463 659 FL 027 222

AUTHOR Anderson, Neil J.
TITLE The Role of Metacognition in Second Language Teaching and Learning. ERIC Digest.
INSTITUTION ERIC Clearinghouse on Languages and Linguistics, Washington, DC.
SPONS AGENCY Office of Educational Research and Improvement (ED), Washington, DC.
REPORT NO EDO-FL-01-10
PUB DATE 2002-04-00
NOTE 4p.
CONTRACT ED-99-CO-0008
AVAILABLE FROM ERIC Clearinghouse on Languages and Linguistics, 4646 40th Street N.W., Washington, DC 20016-1859. Tel: 202-362-0700. For full text: http://www.cal.org/ericcll/DIGEST.
PUB TYPE ERIC Publications (071) -- ERIC Digests in Full Text (073)
EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Learning Processes; *Learning Strategies; *Metacognition; Second Language Instruction; Second Language Learning; *Teaching Methods
IDENTIFIERS ERIC Digests

ABSTRACT

This digest examines the role metacognition can play in the teaching and learning of a second language. Understanding and controlling cognitive processes may be one of the most essential skills that classroom teachers can help second language learners develop. Rather than focus students' attention solely on learning the language, second language teachers can help students learn to think about what happens during the language learning process, which will lead to the development of stronger learning skills. The digest highlights a model of metacognition that is made up of five primary components: preparing and planning for learning, selecting and using learning strategies, monitoring strategy use, orchestrating various strategies, and evaluating strategy use and learning. Also discussed is the interaction of metacognitive skills. (VWL)

Reproductions supplied by EDRS are the best that can be made
from the original document.

ERIC DIGEST

EDO-FL-01-10 • APRIL 2002

The Role of Metacognition in Second Language Teaching and Learning

NEIL J. ANDERSON, BRIGHAM YOUNG UNIVERSITY

ED 463 659

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

BEST COPY AVAILABLE

FL027222

ERIC DIGEST EDO-FL-01-10 • APRIL 2002

The Role of Metacognition in Second Language Teaching and Learning

NEIL J. ANDERSON, BRIGHAM YOUNG UNIVERSITY

During a National Public Radio broadcast in the United States in March 1999, a sixth grader explained what she was learning from playing the Stock Market Game, an activity designed to help children become familiar with how the stock market functions. She said, "This game makes me think how to think" (Prakash, 1999). What this statement reveals is that this young learner was beginning to understand the real key to learning; she was engaged in metacognition.

Metacognition can be defined simply as thinking about thinking. Learners who are metacognitively aware know what to do when they don't know what to do; that is, they have strategies for finding out or figuring out what they need to do. The use of metacognitive strategies ignites one's thinking and can lead to more profound learning and improved performance, especially among learners who are struggling. Understanding and controlling cognitive processes may be one of the most essential skills that classroom teachers can help second language learners develop. It is important that they teach their students metacognitive skills in addition to cognitive skills.

> The distinctions between cognitive and metacognitive strategies are important, partly because they give some indication of which strategies are the most crucial in determining the effectiveness of learning. It seems that metacognitive strategies, that allow students to plan, control, and evaluate their learning, have the most central role to play in this respect, rather than those that merely maximize interaction and input. . . . Thus the ability to choose and evaluate one's strategies is of central importance. (Graham, 1997, pp. 42-43)

Rather than focus students' attention solely on learning the language, second language teachers can help students learn to think about what happens during the language learning process, which will lead them to develop stronger learning skills.

A Model of Metacognition

Metacognition combines various attended thinking and reflective processes. It can be divided into five primary components: (1) preparing and planning for learning, (2) selecting and using learning strategies, (3) monitoring strategy use, (4) orchestrating various strategies, and (5) evaluating strategy use and learning. Teachers should model strategies for learners to follow in all five areas, which are discussed below.

Preparing and Planning for Learning

Preparation and planning are important metacognitive skills that can improve student learning. By engaging in preparation and planning in relation to a learning goal, students are thinking about what they need or want to accomplish and how they intend to go about accomplishing it. Teachers can promote this reflection by being explicit about the particular learning goals they have set for the class and guiding the students in setting their own learning goals. The more clearly articulated the goal, the easier it will be for the learners to measure their progress. The teacher might set a goal for the students of mastering the vocabulary from a particular chapter in the textbook. A student might set a goal for himself of being able to answer the comprehension questions at the end of the chapter.

Selecting and Using Learning Strategies

Researchers have suggested that teaching readers how to use specific reading strategies is a prime consideration in the reading classroom (Anderson, 1999; Cohen, 1998; Oxford, 1990). The metacognitive ability to select and use particular strategies in a given context for a specific purpose means that the learner can think and make conscious decisions about the learning process.

To be effective, metacognitive instruction should explicitly teach students a variety of learning strategies and also when to use them. For example, second language readers have a variety of strategies from which to choose when they encounter vocabulary that they do not know and that they have determined they need to know to understand the main idea of a text. One possible strategy is word analysis: for example, dividing the word into its prefix and stem. Another possible strategy is the use of context clues to help guess the meaning of a word. But students must receive explicit instruction in how to use these strategies, and they need to know that no single strategy will work in every instance. Teachers need to show them how to choose the strategy that has the best chance of success in a given situation. For example, unfamiliar words that include prefixes or suffixes that the student knows (e.g., *anti-*, *-ment*) are good candidates for the use of a word analysis strategy.

Monitoring Strategy Use

By monitoring their use of learning strategies, students are better able to keep themselves on track to meet their learning goals. Once they have selected and begun to implement specific strategies, they need to ask themselves periodically whether or not they are still using those strategies as intended. For example, students may be taught that an effective writing strategy involves thinking about their audience and their purpose in writing (e.g., to explain, to persuade). Students can be taught that to monitor their use of this strategy, they should pause occasionally while writing to ask themselves questions about what they are doing, such as whether or not they are

CENTER FOR APPLIED LINGUISTICS • ERIC CLEARINGHOUSE ON LANGUAGES AND LINGUISTICS • 4646 40TH ST NW • WASHINGTON DC 20016-1859 • 202-362-0700

providing the right amount of background information for their intended audience and whether the examples they are using are effective in supporting their purpose.

Orchestrating Various Strategies

Knowing how to orchestrate the use of more than one strategy is an important metacognitive skill. The ability to coordinate, organize, and make associations among the various strategies available is a major distinction between strong and weak second language learners. Teachers can assist students by making them aware of multiple strategies available to them—for example, by teaching them how to use both word analysis and context clues to determine the meaning of an unfamiliar word. The teacher also needs to show students how to recognize when one strategy isn't working and how to move on to another. For example, a student may try to use word analysis to determine the meaning of the word *antimony*, having recognized *anti* as a prefix meaning against. But that strategy won't work in this instance. *Anti* is not a prefix here; antimony is a metallic chemical element that has nothing to do with being against or opposed to something. When the student finds that word analysis does not help her figure out what this word means, she needs to know how to turn to other strategies, such as context clues, to help her understand the word.

Evaluating Strategy Use and Learning

Second language learners are actively involved in metacognition when they attempt to evaluate whether what they are doing is effective. Teachers can help students evaluate their strategy use by asking them to respond thoughtfully to the following questions: (1) What am I trying to accomplish? (2) What strategies am I using? (3) How well am I using them? (4) What else could I do? Responding to these four questions integrates all of the previous aspects of metacognition, allowing the second language learner to reflect through the cycle of learning. Preparing and planning relates to identifying what is to be accomplished, while selecting and using particular strategies relates to the question of which strategies are being used. The third question corresponds to monitoring strategy use, while the fourth relates to the orchestration of strategies. The whole cycle is evaluated during this stage of metacognition.

For example, while teaching the specific reading skill of main idea comprehension, the teacher can help students evaluate their strategy use by using the four questions:

(1) *What am I trying to accomplish?* The teacher wants students to be able to articulate that they are trying to identify the main idea in the text they are reading and that they are doing so because understanding the main idea is key to understanding the rest of the text.

(2) *What strategies am I using?* The teacher wants the readers to know which strategies are available to them and to recognize which one(s) they are using to identify the main idea.

(3) *How well am I using the strategies?* The teacher wants the students to be able to judge how well they are using the strategies they have chosen, that is, whether they are implementing them as intended and whether the strategies are helping them achieve their goal.

(4) *What else could I do?* If the strategies that students are using are not helping them to accomplish their goal (i.e., identifying the main idea), the teacher wants them to be able to identify and use alternate strategies. Teachers need to make students aware of the full range of strategies available to them.

Research shows that learners whose skills or knowledge bases are weak in a particular area tend to overestimate their ability in that area (Kruger & Dunning, 1999). In other words, they don't know enough to recognize that they lack sufficient knowledge for accurate self-assessment. In contrast, learners whose knowledge or skills are strong may underestimate their ability. These high-ability learners don't recognize the extent of their knowledge or skills. Kruger and Dunning's research also shows that it is possible to teach learners at all ability levels to assess their own performance more accurately. In addition, their research showed that for tasks involving logic and grammar, improved self-assessment corresponded with improvement in the skills being assessed.

The Interaction of Metacognitive Skills

Each of the five metacognitive skills described in this digest interacts with the others. Metacognition is not a linear process that moves from preparing and planning to evaluating. More than one metacognitive process may be occurring at a time during a second language learning task. This highlights once again how the orchestration of various strategies is a vital component of second language learning. Allowing learners opportunities to think about how they combine various strategies facilitates the improvement of strategy use.

Conclusion

The teaching of metacognitive skills is a valuable use of instructional time for a second language teacher. When learners reflect upon their learning strategies, they become better prepared to make conscious decisions about what they can do to improve their learning. Strong metacognitive skills empower second language learners.

References

Anderson, N. J. (1999). *Exploring second language reading: Issues and strategies*. Boston: Heinle & Heinle.

Cohen, A. D. (1998). *Strategies in learning and using a second language*. New York: Longman.

Graham, S. (1997). *Effective language learning*. Clevedon, England: Multilingual Matters.

Kruger, J., & Dunning, D. (1999). Unskilled and unaware of it: How difficulties in recognizing one's own incompetence lead to inflated self-assessment. *Journal of Personality and Social Psychology, 77*, 1121-1134.

Oxford, R. L. (1990). *Language learning strategies: What every teacher should know*. New York: Newbury.

Prakash, S. (Reporter). (1999, March 19). Market games [Radio series episode]. *All things considered*. Washington: National Public Radio.

This digest was prepared with funding from the U.S. Dept. of Education, Office of Educational Research and Improvement, National Library of Education, under contract no. ED-99-CO-0008. The opinions expressed do not necessarily reflect the positions or policies of ED, OERI, or NLE.